

Key position of timber manufacturer in the chain of end users' quality needs

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ABSTRACT

Following issues are driving our business

- Towards bioeconomy : Green energy, Bio-based products
- Sustainability sets requirements: Energy efficiency, Sustainable housing, Ecological products, Scarce raw materials, Circular flow economy
- Health & Well-being: Safe products, Life style sciences, Aesthetics
- Technology development: Mass-customization, Information, Bio & Nano, Relationship driven business

Implications to wood products

- We have a good story to tell! :Low carbon footprint, Wood products as carbon sink, Renew-able raw material
- Bio-energy is an opportunity: Residues value up, New businesses to portfolio
- Energy efficient housing: Systems and components, Renovation
- Increasing wood scarcity & cost: More efficient use of wood, New values to wood products, New certified products, Standardized solutions, Bio-chemicals for wood products, Enhanced properties for wood products (fire, durability..), Multi-functional products, Understand customer business, Fit-for-process solutions

Quality means different aspects for wood industries and end users of wood products

- **End use related performance:** durability > < Life Cycle, strength properties, appearance, form stability
- **Process related performance:** yield in process, dimensional accuracy / form, efficiency in process, consistency, price
- **Societal performance:** sustainability, environmental performance, eco efficiency

The role of basic manufacturer and trader

It is the responsibility of the basic manufacturer to keep the material profitable

- against all substitutes,
- need cooperation with timber traders and
- transparency in value chain needed

Traders prepare to distinguish in their product portfolio based on real quality supported by latest state of art technologies

Profitability is coming from multiple sources

- Constant drive towards process efficiency
- Constancy in quality and performance
- Product enhancement and functionality improvement
- Totally new solutions

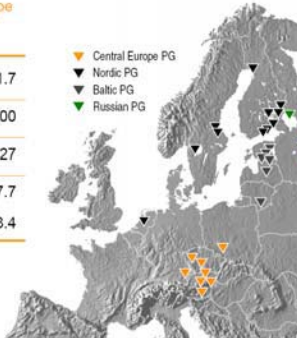
Stora Enso
In brief

- A world leader
 - 16.5 Mton of paper and board
 - 7.4 million m³ of sawn goods
- Sales EUR 14.6 billion
- Approximately 44 000 employees in more than 40 countries
- Market capitalisation EUR 9.5 billion (31 Dec 2006)
- Shares listed on Helsinki, Stockholm and New York stock exchanges



Stora Enso Timber
Manufacturing base in Europe

Net sales in € billion	1.7
Employees	5 000
# of production units	27
Sawn capacity, Mm ³	7.7
Further processing, Mm ³	3.4



Strategy in action
Engineered wood products – striving for a clear leadership in selected product lines

- From rough sawn to a supplier of components and sub-products
- Build on continuous technology and process innovation in
 - ▶ Log x-ray
 - ▶ Automated scanning / sorting
 - ▶ In-house development of strength grading
 - ▶ Automated, scanner based finger jointing

Glulam Japan

- Market leader
- 4 mills, 335,000 m³

Joinery components

- Market leader
- 4 mills, 120,000 m³

KVH

- Market leader
- 2 mills, 280,000 m³



What is driving our business

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 - Sustainable housing
 - Ecological products
 - Scarce raw materials
 - Circular flow economy

- We have a good story to tell!
 - ▶ Low carbon footprint
 - ▶ Wood products as carbon sink
 - ▶ Renewable raw material
- Bio-energy is an opportunity
 - ▶ Residues value up
 - ▶ New businesses to portfolio
- Energy efficient housing
 - ▶ Systems and components
 - ▶ Renovation
- Increasing wood scarcity & cost
 - ▶ More efficient use of wood
 - ▶ New values to wood products


What is driving our business

Implications to wood products

- Health & Well-being
 - Safe products
 - Life style sciences
 - Aesthetics
- Technology development
 - Mass-customization
 - Information
 - Bio & Nano
- Relationship driven business

- ▶ New certified products
- ▶ Visualization
- ▶ Standardized solutions
- ▶ Bio-chemicals for wood products
- ▶ Enhanced properties for wood products (fire, durability..)
- ▶ Multi-functional products
- ▶ Understand customer business
- ▶ Fit-for-process solutions

Wood Products
Portfolio choices ▶ positioning in building value chain



Material Business
"Cost / quality leader for value-add wood products"

Commodity sawn and planed goods → ThermoWood products
Strength grading (MSR)
Component materials
New applications

Component business
"Components for industrial customers"

Ready profiled window components
Pre-cut wall components
CLT wall elements
Modular panel systems

Solution business
"Design and service added"

Made to order open web joists
CLT total house system
Roof / floor cassettes

New Businesses
"Own value chain"

Bio-energy
Bio-chemicals
Bio-composites

Direct feedback from end-uses, for further product/process development also in material and component businesses

The share of commodity sawn-goods down, clearly improve mix